

Regional Clusters of Opportunity

Northern Rural Training & Employment Consortium (NoRTEC)



NoRTEC Region

The NoRTEC region is larger than 6 states combined.

Includes eleven counties stretching from Pacific Ocean/Oregon border east to the Oregon/Nevada border.

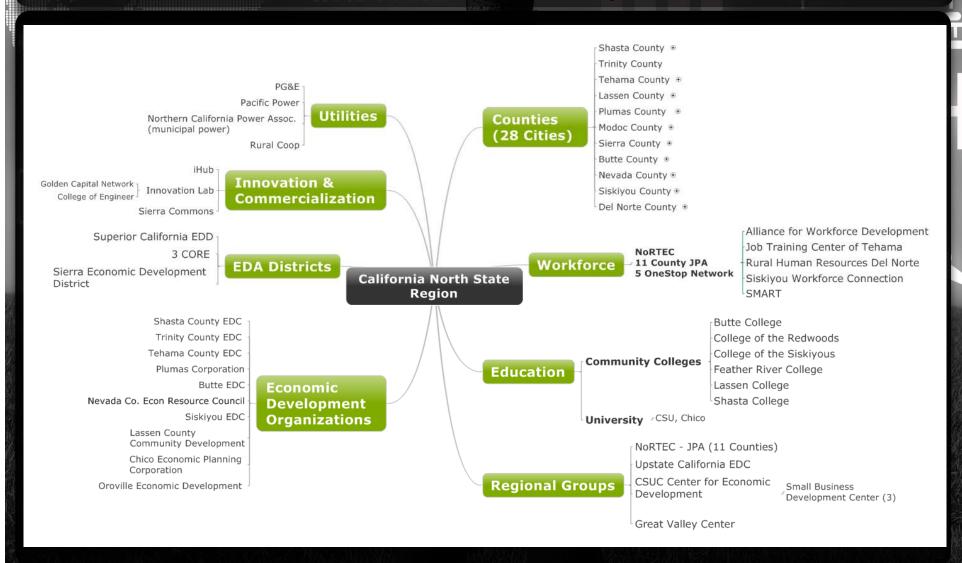


NoRTEC Guiding Principles

NoRTEC uses six guiding principles to determine involvement in new initiatives:

- 1. Will the initiative create new jobs?
- 2. Will the initiative serve dislocated workers?
- 3. Will the initiative provide Career Pathway Training?
- 4. Will the initiative assist business growth in key industry sectors?
- 5. Will the initiative stimulate economic recovery and growth?
- 6. Will the initiative create collaboration and leverage resources?

Network of Education, Workforce & Economic Development



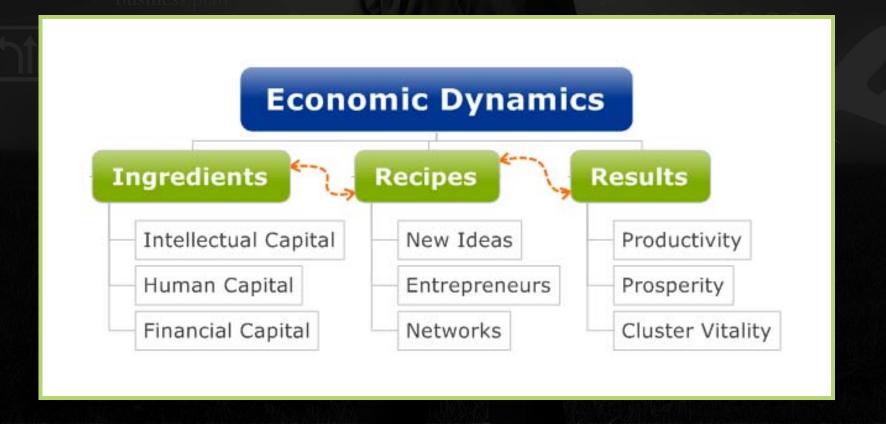
Regional Clusters of Opportunity Initiative

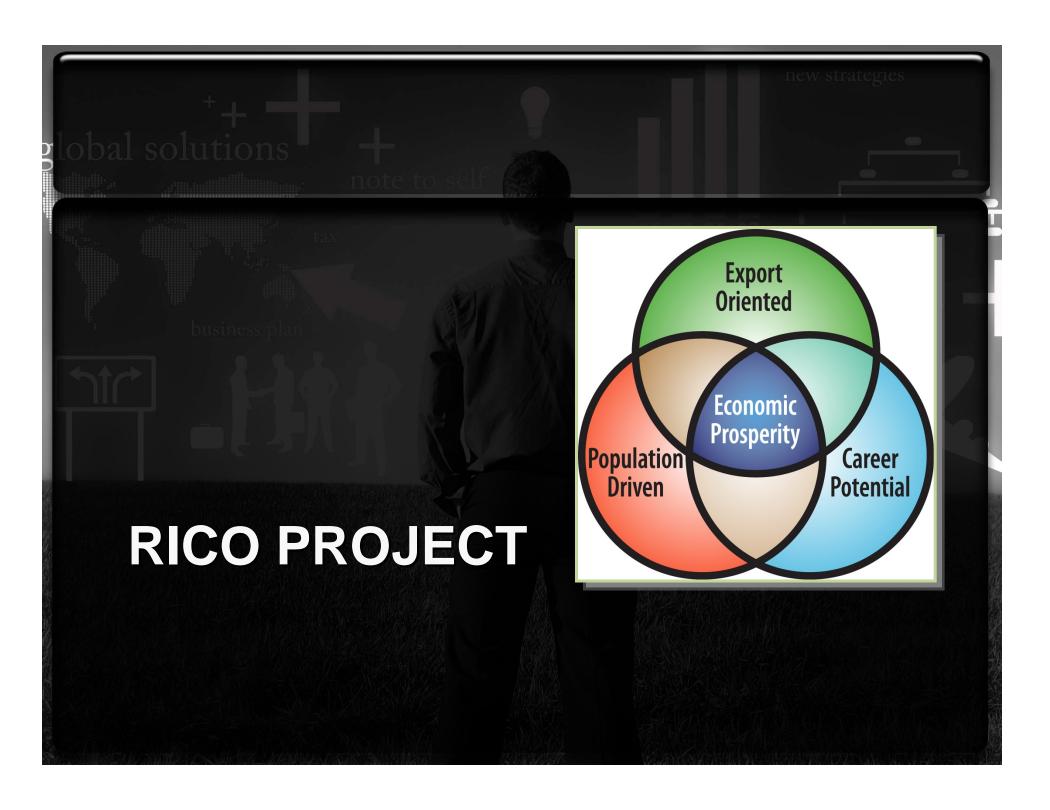
The Network focused on potential economic opportunity and business needs which would:

- 1. Create career pathways in three key clusters,
- Stimulate clean-energy and green product/practice deployment,
- Provide business access to capital and resources,
- Accelerate technology transfer and commercialization.

Project Outcomes

The Cluster of Opportunity project became an action-oriented process.





Three Economic Clusters

- Green Sector 10-yr potential growth 4,000 jobs
- 2. Alternative Fuels & Vehicles an emerging industry of the Green Sector
- 3. Allied Health Sector an existing and mature cluster

Klamath Falls OREGON DEL NORTE MODOC HEALTH SISKIYOU BIOMASS HEALTH HEALTH GEOTHERMAL MEDICAL DEVICES WIND Data GREEN BUILDINGS ALTERNATIVE FUEL RECYCLING BIOMASS SOLAR LASSEN AGRICULTURE BIOMASS TRINITY 395 SHASTA TEHAMA PLUMAS HEALTH 101 BUTTE SOLAR SIERRA **ALTERNATIVE FUEL** AGRICULTURE NEVADA INFO TECH ADVANCED MATERIALS *Sacramento

Green Sector

THE GREEN ECONOMY AND ITS MULTIPLE FACETS

THE ADAPTIVE GREEN ECONOMY

Businesses:

- · Founded on principles of sustainability
- Transforming processes and products to improve resource efficiency and reduce negative environmental impacts
- · Supporting transformation across the supply chain

Households, Nonprofits and Public Entities:

- · Changing consumption habits
- · Improving resource efficiency

REST OF THE ECONOMY

Businesses, Households, Nonprofits and Public Entities operating business-as-usual

WHAT IS PRODUCED

THE CORE

GREEN

ECONOMY

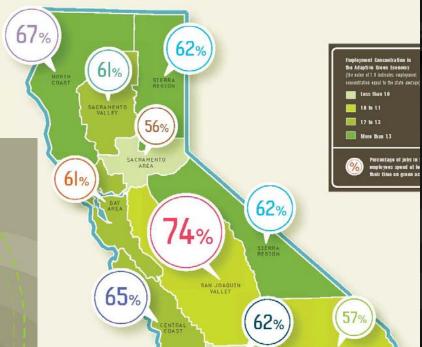
Businesses that provide the products and services that:

· Provide alternatives to carbon-based energy

Conserve energy and all natural resources
 Reduce pollution and repurpose waste

HOW THINGS ARE PRODUCED AND OPERATED

ADAPTIVE GREEN ECONOMY
EDD SURVEY OF EMPLOYERS ON GREEN OCCUPATIONS
MAY 2009 — JANUARY 2010

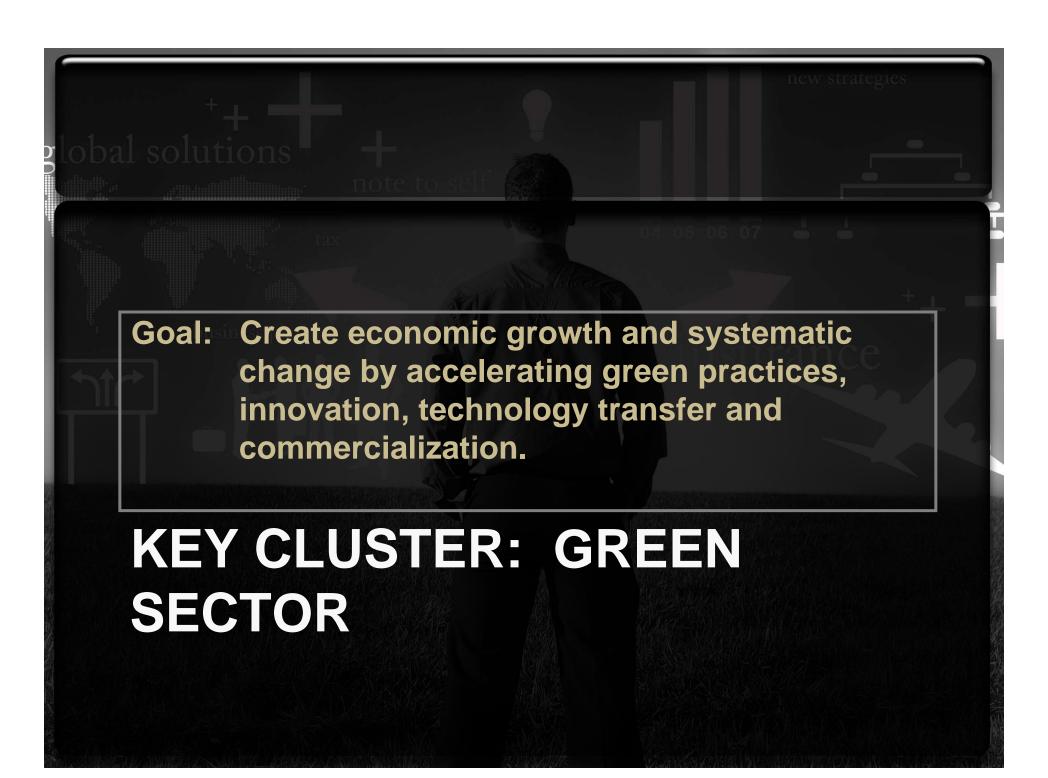


new strategies

Action Plan - Framework

Progress-at-a-Glance

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Sector:	
Data-Driven Decision Making	Make effective use of labor market, industry and occupational trends, assessment data and other information critical to guiding investment.
Employer Engagement	Engage employers in providing insights into industry and workforce needs, becoming partners in design, implementation and investment of resources.
Partnership Building	Identify and secure a broad range of partners needed to implement.
Leveraging Resources	Leverage local, state, federal and private sector resources to increase the impacts.
Policy Alignment	Align and connect education, workforce and economic development, government and other policies to improve outcomes.
Continuum of Participant Support	An interconnected continuum of processes and services that enable effective workforce delivery.
Sustainable Systems Change	Integrate implementation of all six factors for long-term and ongoing systems change for public and private partners.
Performance Measures	
Outcomes	



Strategic Implementation Action Steps

- Strategy 1: Continue to build the synergy generated with the Innovation Lab to scale business growth through access to capital, specialized expertise and accelerate technology transfer and commercialization.
- Strategy 2: Collaborate with cities and counties to implement local "green" strategies and programs, energy deployment plans, workforce training, and develop career pathways.
- **Strategy 3:** Assist businesses with technology development and commercialization.

Cluster Highlight

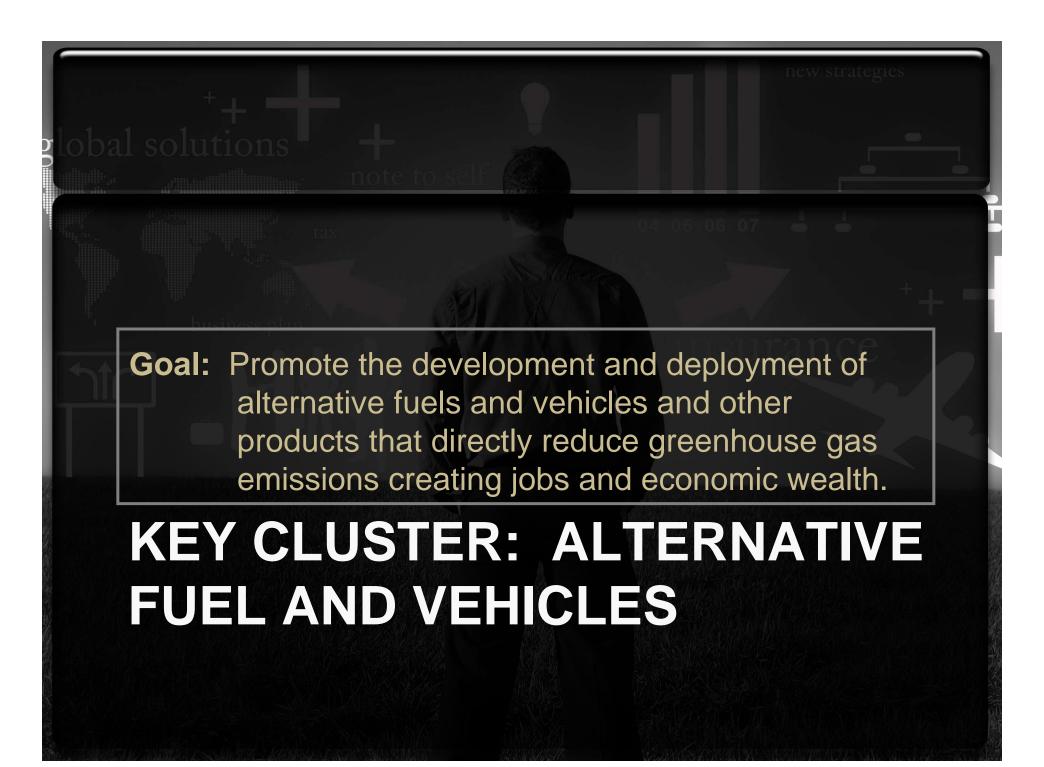
June 2010 Governor's Innovation Challenge Grant

October 2010 California iHub Designation

December 2010 Launch Innovation Lab

Early results since July 2010 include:

5 companies, proof of concept stage 27 companies, Business Portfolio all at different stages of growth



Strategic Implementation Action Steps

- Strategy 1: Become the West Coast National Alternative Fuels
 Training Center for Propane and Propane Hybrid,
 certified by NAFTC.
- Strategy 2: Initiate a pilot Clean Cities Coalition, which could be expanded to the region, to deploy new alternative transportation fuels.
- Strategy 3: Continue to work with federal, state and local partners on infrastructure, financing, policies and incentives to accelerate deployment of technologies.
- **Strategy 4:** Connect businesses with resources to accelerate new product development and deployment.

Cluster Highlights

Niche Opportunity "propane as an autogas"

CARB approved ROUSH Cleantech's technology light & medium duty vehicle conversions

Transfer Flow Inc identified market opportunity – requires a highly skilled and qualified workforce.

AB 118 Workforce
Development Grant to
implement an
Alternative Fuel –
Propane Conversion
Training program.

Formal Announcement: May 26, 2011 Training
Launch:
Certified Training
Classes June

Transfer Flow, Inc.



What if we could "convert" "gasoline" technologies to other alternative fuels for fleets and light/medium duty trucks?

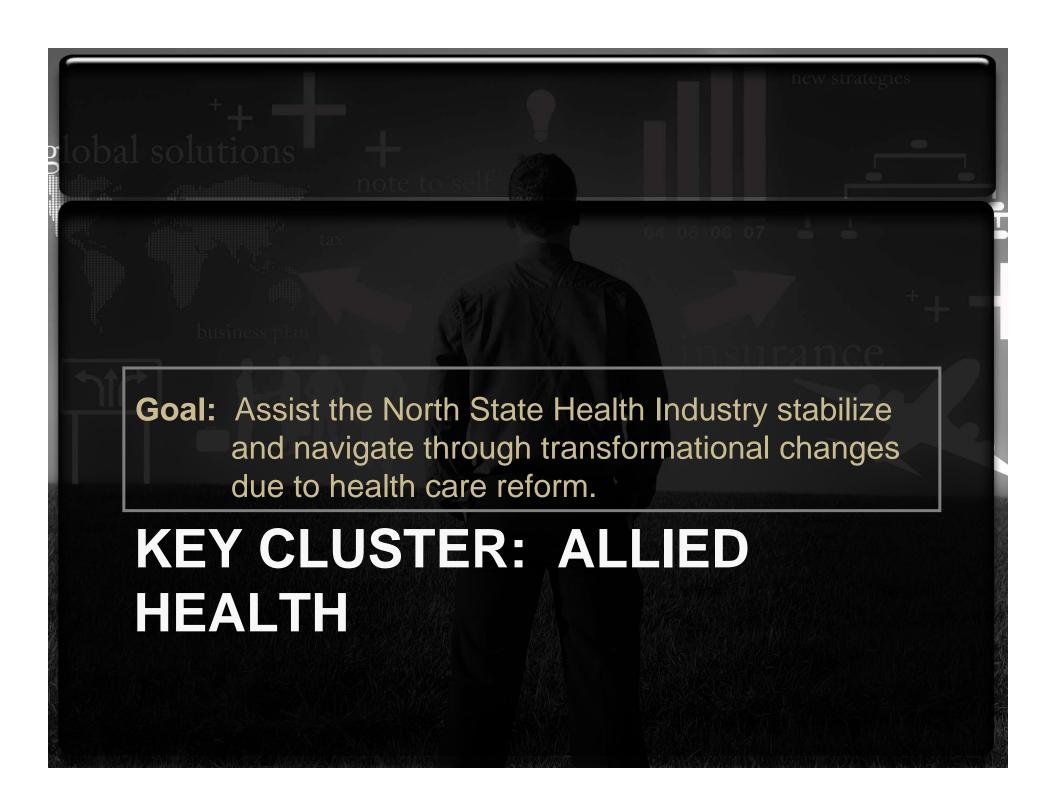
Propane: 40-50% less than gas

97% domestically produced

24% reduction in GHG

Infrastructure investment, 1/4 cost

Training: Certified by National Alternative Fuel Training Consortium, funded by AB 118 CEC



Strategic Implementation Action Steps

Strategy 1: Help further the rural hospitals and clinics' policy agenda.

Strategy 2: Provide training and career pathways that address rural health industry's workforce needs.

Cluster Highlight

Del Norte a "frontier" region

Invest in comprehensive prevention-oriented partnerships

All children have health coverage

Health and familyfocused human services shift resources toward prevention

California
Endowment
"Building Healthy
Communities"
Program

new strategies

Vision

North State
California's Emerging Innovation Hub

Create a regional and global business climate by fostering a culture of entrepreneurship, innovation and collaboration.